Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for displaying a three-dimensional image of an organ or structure inside the body, the system comprising:

a processor configured to be communicatively coupled to a probe, the probe being configured to be located in or adjacent to the organ or structure inside the body;

memory coupled to the processor and configured to store image data pertaining to the organ or structure inside the body; and

a three-dimensional display coupled to the processor and configured to simultaneously display the three-dimensional image and a representation of the probe,

wherein the image data of the three-dimensional display is acquired prior to the probe being positioned inside the body.

2. (Original) The system of claim 1, wherein the representation of the probe is registered with the three dimensional image of the organ or structure inside the body.

3. (Original) The system of claim 1, wherein the representation of the probe is registered with the three dimensional image of the organ or structure inside the body using a localization system.

4. (Original) The system of claim 1, wherein the organ or structure inside the body is a heart.

5. (Original) The system of claim 1, wherein the probe is a catheter.

6. (Original) The system of claim 1, wherein the system is an electrophysiology system.

7. Cancelled.

8. (Original) The system of claim 1, wherein the image data is acquired during the image-guided intervention procedure using an internal medical imaging device.

9. (Original) The system of claim 1, wherein the system is further configured to display a map of the electrical properties of the organ or structure inside the body.

10. (Original) The system of claim 1, wherein the system is further configured to display historical data related to the organ or structure inside the body.

11. (Original) The system of claim 1, wherein the system is further configured to display auxiliary data related to an image-guided interventional procedure.

12. (Original) The system of claim 1, wherein the display is further configured to display visual navigational information related to an image-guided intervention procedure.

13. (Original) The system of claim 1, wherein the three-dimensional display is a spatial three-dimensional display.

14. (Currently Amended) A system for displaying a three-dimensional image of a heart, the system comprising:

a processor configured to be communicatively coupled to a probe;

memory coupled to the processor and configured to store image data pertaining to the heart; and

a three-dimensional display coupled to the processor and configured to simultaneously display the three-dimensional image of the heart and a representation of the probe,

wherein three-dimensional display is comprised of pre-operative image data acquired prior to the probe being positioned inside the body.

15. (Original) The system of claim 14, wherein the representation of the probe is registered with the three dimensional image of the heart.

16. (Original) The system of claim 14, wherein the representation of the probe is registered with the three dimensional image of the heart using a localization system.

17. (Original) The system of claim 14, wherein the system is an electrophysiology monitoring system.

18. (Original) The system of claim 14, wherein the probe is a catheter configured to collect data representative of the electrical properties of the heart.

19. (Original) The system of claim 14, wherein the system is further configured to display a map of the electrical properties of the heart.

20. (Original) The system of claim 14, wherein the three-dimensional display is a spatial three-dimensional display.

21-28. Cancelled.

29. (Currently Amended) A system for displaying a three-dimensional image of an organ or structure inside the body, the system comprising:

memory configured to store a first set of image data pertaining to the organ or structure inside the body;

a processor coupled to the memory and configured to be communicatively coupled to an imaging device and a probe, the imaging device being configured to generate a second set of image data pertaining to the organ or structure inside the body, and the probe being configured to be located in or adjacent to the organ or structure inside the body, the processor further configured to generate the three-dimensional image using the first set of image data and the second set of image data; and

a three-dimensional display coupled to the processor and configured to simultaneously display the three-dimensional image and a representation of the probe, wherein three-dimensional display is comprised of pre-operative image data acquired prior to the probe being positioned inside the body.

30. (Original) The system of claim 29, wherein the system is configured to provide a warning related to an image-guided interventional procedure.

31. (Original) The system of claim 29, wherein the system is configured to provide a warning when the first set of image data differs from the second set of image data according to a predetermined criterion.

32. (Original) The system of claim 29, wherein the system is configured to determine a first estimate of the location of the probe and a second estimate of the location of the probe and to provide a warning when the first estimate differs from the second estimate according to a predetermined criterion.

33. (New) The system of claim 29, wherein the three-dimensional display further includes a visual indication of a change in color of the pre-operative image data in response to detection within a predetermined tracked distance relative to the probe.

34. (New) A system for displaying a three-dimensional image of a heart, the system comprising:

a processor configured to be communicatively coupled to a probe;

memory coupled to the processor and configured to store image data pertaining to the heart; and

a three-dimensional display coupled to the processor and configured to simultaneously display the three-dimensional image of the heart and a representation of the probe, wherein the three-dimensional display further includes a visual indication of a change in color of at least a portion of the three-dimensional image in response to detection within a predetermined tracked distance relative to the probe.

35. (New) The system of claim 1, wherein the three-dimensional image includes a pre-operative image data that is weighted to match an acquired intra-operative image data.

36. (New) The system of claim 1, wherein the three-dimensional display further includes a visual indication of a change in color of the pre-operative image data in response to detection within a predetermined tracked distance relative to the probe.

37. (New) The system of claim 14, wherein the pre-operative image data is weighted to match an acquired intra-operative image data.

38. (New) The system of claim 14, wherein the three-dimensional display further includes a visual indication of a change in color of the pre-operative image data in response to detection within a predetermined tracked distance relative to the probe.

39. (New) The system of claim 29, wherein the pre-operative image data is weighted to match an acquired intra-operative image data.

40. (New) The system of claim 29, wherein the three-dimensional display further includes a visual indication of a change in color of the pre-operative image data in response to detection within a predetermined tracked distance relative to the probe.